SECTION 08310

FLOOR ACCESS HATCHES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

1.2 SUMMARY

- A. This Section includes fire-rated floor doors and frames and non-rated exterior floor door.
- B. Related Sections:
 - 1. Division 7 Section "Roof Accessories" for roof hatches.
 - 2. Division 8 Section "Access Doors" for wall and ceiling access doors.

1.3 SUBMITTALS

- A. Product data for each type of door assembly specified, including details of construction relative to materials, individual components, profiles, finishes, and fire-protection ratings (if required).
- B. Shop drawings showing fabrication and installation of fire rated floor doors and frames, including details of frame type, anchorage, and accessory items.

1.4 QUALITY ASSURANCE

- A. Single-Source Responsibility: Obtain access doors for entire Project from one source and by a single manufacturer.
- B. Fire-Rated Access Doors and Frames: Units complying with NFPA 80 that are identical to access door and frame assemblies tested for fire-test-response characteristics per the following test method and that are labeled and listed by UL, ITS, or another testing and inspecting agency acceptable to authorities having jurisdiction:
 - 1. ASTM E 119 or UL 263 for horizontal access doors and frames.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. The Bilco Company.

2.2 MATERIALS

A. Aluminum Sheet: ASTM B 209, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with not less than strength and durability properties of alloy 5005-H15; with minimum thickness indicated representing specified thickness according to ANSI H35.2.

2.3 FIRE RATED FLOOR DOORS

- A. Aluminum Floor Door: Extruded-aluminum angle frame with 1/4-inch- thick, fillable aluminum pan to receive concrete; loading capacity to support 150-lbf/sq. ft. pedestrian live load. Aluminum mill finish.
- B. Hardware:
 - 1. Hinges: Heavy-duty, stainless-steel continuous hinge.

- 2. Latch: Stainless-steel slam latch with gasketed cover plug and removable turn handle (top side) and cable release handle (underside).
- 3. Hardware Material: Stainless steel, including latch and lifting mechanism assemblies, hold-open arms, and all brackets, hinges, pins, and fasteners.
- 4. Insulation: Manufacturer's standard insulation to comply with fire rating required.

2.4 EXTERIOR FLOOR DOORS

A. Aluminum Floor Door: Extruded-aluminum angle frame with 1/4-inch- thick, diamond texture aluminum plate reinforced for loading capacity to support 300-lbf/sq. ft. pedestrian live load. Aluminum mill finish.

B. Hardware:

- 1. Hinges: Heavy-duty, stainless-steel continuous hinge.
- 2. Latch: Stainless-steel slam latch with gasketed cover plug and removable turn handle (top side) and cable release handle (underside).
- 3. Hardware Material: Stainless steel, including latch and lifting mechanism assemblies, hold-open arms, and all brackets, hinges, pins, and fasteners.
- 4. Insulation: Manufacturer's standard insulation.
- C. Channel Drain: 1/4 inch channel aluminum frame with recessed anchors
 - 1. 1-1/2 inch drain coupling welded to frame for drain pipe connection.
 - 2. Continuous EPDM gasketing

2.5 FABRICATION

- A. Manufacture door assembly as an integral unit ready for installation.
- B. Steel Doors and Frames: Continuous welded construction. Grind exposed welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type required to secure access panels to types of supports indicated.
- C. Locking Devices: Furnish number required to hold door in flush, smooth plane when closed.

PART 3 - EXECUTION

3.1 PREPARATION

A. Advise Installers of other work about specific requirements relating to access door installation, including sizes of openings to receive access door and frame, as well as locations of supports, inserts, and anchoring devices. Furnish inserts and anchoring devices for access doors that must be built into other construction. Coordinate delivery with other work to avoid delay.

3.2 INSTALLATION

- A. Comply with manufacturer's instructions for installing floor doors and frames.
- B. Set frames accurately in position and attach securely to supports with plane of face panels aligned with adjacent finished surfaces.
- C. Install access doors flush with adjacent finish surfaces.

3.3 ADJUST AND CLEAN

- A. Adjust hardware and panels after installation for proper operation.
- B. Remove and replace floor panels or frames that are warped, bowed, or otherwise damaged.

END OF SECTION 08310